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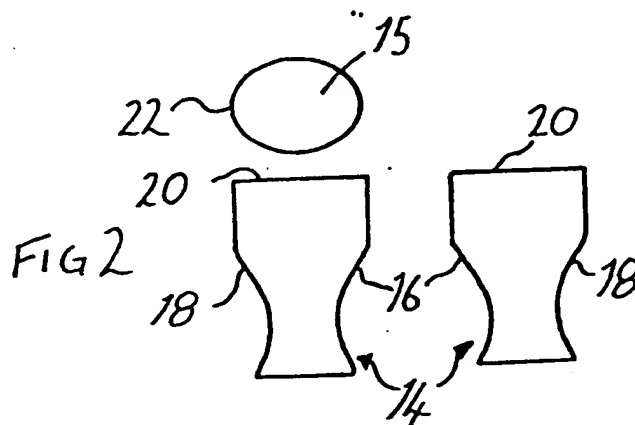
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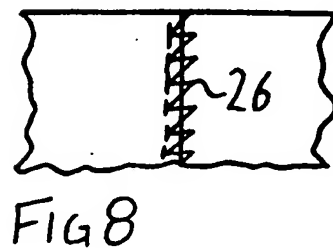
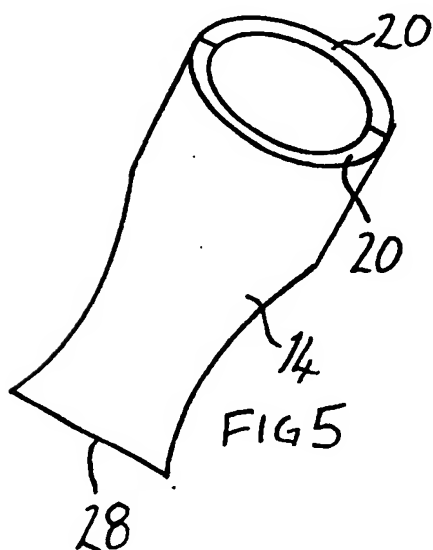
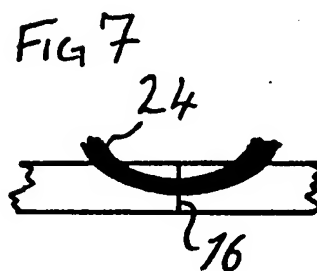
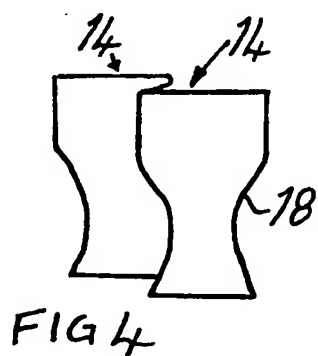
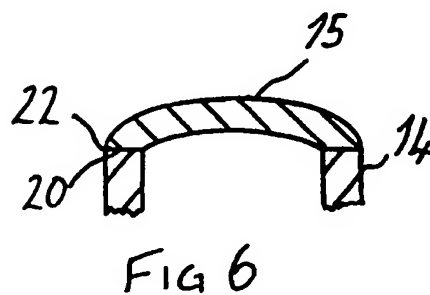
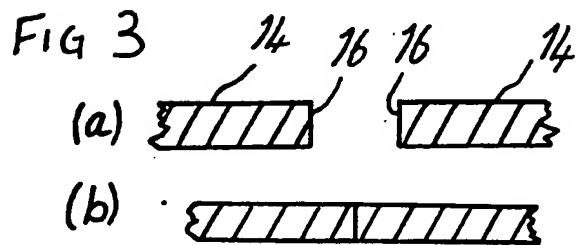
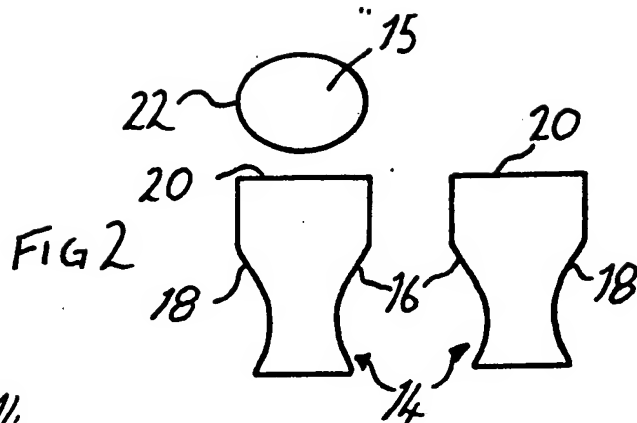
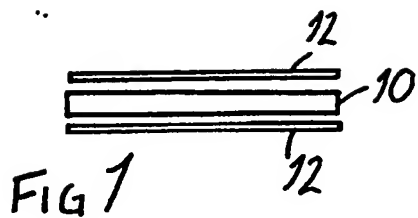
(56) Documents cited
US 3965955 A US 3821976 A

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(54) Manufacture of golf club head covers

(57) Two generally shaped blanks 14 are cut from a sheet of foamed plastics material, opposite side edges of the blanks are adhered together to form a generally tubular body, a lid 15 is adhered to one end of the tubular body, and the adhered seams are strengthened by sewing.





Manufacture of Golf Club Head Covers

This invention relates to a method of manufacturing golf club head covers.

Golf club head covers are commonly used on golf clubs, particularly those referred to as "woods", to protect the heads of the golf clubs from damage in the golf bag. Such covers are commonly fabricated from fabric, which may be waterproofed, and are generally of tubular configuration with one end open and the other closed.

The method of manufacturing such head covers has hitherto been relatively complex and involves a number of operations; see, for example, U.K. specification 2185412.

The invention seeks to provide a simple and more economical method of making golf club head covers. According to the present invention there is provided a method of making golf club head covers which comprises cutting out two generally chalice-shaped blanks from a foamed plastics material, adhering opposite side edges of the blanks together to form a generally tubular body, adhering a lid to one end of the tubular body, and strengthening the adhered seams by sewing.

Preferably, the strengthening step is carried out with a blind hemmer either with a single thread chain stitch or a twin thread touching chain stitch employing a curved needle so that the stitching need not penetrate through the full thickness of the cover material. When a closed cell foamed plastics material is used as the principal cover material, and the joins are adhered using a suitable adhesive for the plastics material, the cover will be waterproof and by ensuring that the stitching needle does not penetrate during the sewing step, the waterproofing qualities of the head cover are maintained.

The material used for the head cover is preferably a closed cell sponge rubber laminated on both sides with a suitable fabric. The latter may conveniently comprise nylon, polyester, cotton or the like, but due to its hard wearing properties and ease of washability and drying, nylon is currently preferred. An especially preferred fabric is laminated sheet of neoprene sponge rubber, typically 3mm thick, having a nylon fabric laminated to either surface.

The lid is preferably of the same fabric material as used for the remainder of the cover.

Indicia such as logos, club numbers and the like may be applied on the external surface of the cover material. Preferably this is achieved using a transfer specifically designed to adhere to the fabric chosen. Suspension means, such as a D-ring of metal or the like, may, if wished, be secured to the external surface of the cover material, typically by stitching.

Because of the properties of the preferred fabric employed, the head cover of the invention has an impact resistance given by the neoprene sponge portion of the laminate and so no extra manufacturing processes are required to sew a cushioning fabric into the product. The product is also

waterproof and, since it has only one thin fabric covering on the outside that can absorb water, it dries very quickly if wet, for example, by rain. The fabric is relatively stiff and resilient and thus the head cover maintains its shape.

The invention will be described further, by way of example, by reference to the accompanying drawings in which:

Figure 1 is a diagrammatic exploded sectional view of the fabric suitable for use in the method of the invention;

Figure 2 is a diagrammatic view of three cut out blanks for making the cover;

Figures 3(a) and (b) illustrate the joining of the edges of the blanks;

Figure 4 illustrates two of the blanks joined together;

Figure 5 illustrates the intermediate tubular configuration;

Figure 6 illustrates the application of the lid;

Figure 7 illustrates the stitching method;

Figure 8 is a view of the seam after stitching.

Referring to the drawings, a golf club head cover is manufactured from a sheet of laminated material which comprises of 3mm thick closed cell neoprene sponge layer 10 having laminated to each side thereof a woven nylon fabric 12. Blanks are cut or stamped from the sheet of fabric, two in a "chalice"-like shape 14 and one in a circle 16 to act as the lid. The blanks 14 are placed side by side and have adjacent edges 16 and opposite edges 18. The adjacent edges are covered with a contact adhesive suitable for the plastics material foam chosen and are butted together as illustrated in Figure 3 to produce the article shown in Figure 4. The opposite edges 18 are then covered with a contact adhesive and butted to one another to produce the article shown in Figure 5.

Finally, top edges 20 are coated with contact adhesive and butted to the edge 22 of the lid 15 to produce the final shape of the product. In this form the product is totally sealed since the fabric is waterproof and the seams are watertight owing to the use of adhesive. However, it is necessary to strengthen the seams by sewing. Preferably this is accomplished without piercing the fabric so as not to lose the waterproof character of the product. This may be achieved by using a blind hemmer either with a single thread chain stitch or the twin thread touching chain stitch. The needle 24 is curved and as can be seen in Figure 7 can be arranged not to penetrate the full thickness of the fabric. The seam produced is illustrated at 26 in Figure 8; all the adhered seams are strengthened in this manner.

The raw edge 28 at the bottom of the cover may, if desired, be finished off, for example, by use of a binding to neaten up the product. One preferred form of binding (not shown in the drawings) is the application of an elastic table ribbon over the edge and stitched in place to give a neat border.

The invention further includes golf club head covers manufactured in accordance with the method described.

The method of the invention provides a simple and inexpensive way of manufacturing golf club head covers which are attractive, waterproof and easy to use.

Claims:

1. A method of making a golf club head cover, which comprises cutting out two generally chalice-shaped blanks from a sheet comprising foamed plastics material, adhering opposite side edges of the blanks together to form a generally tubular body, adhering a lid to one end of the tubular body, and strengthening the adhered seams by sewing.
2. A method according to claim 1, wherein the strengthening step is carried out using a blind hemmer either with a single thread chain stitch or a twin thread touching chain stitch employing a curved needle so that the stitching does not penetrate through the full thickness of the sheet material.
3. A method according to claim 1 or 2, wherein the foamed plastics material is of closed cell type.
4. A method according to claim 3, wherein said sheet material comprises a closed cell sponge rubber laminated on both sides with a fabric.
5. A method according to claim 4, wherein said fabric comprises nylon.
6. A method according to claim 4 or 5, wherein said closed cell sponge rubber comprises a sheet of neoprene sponge rubber.
7. A method according to any of claims 1 to 6, wherein said lid is of the same sheet material as used for the remainder of the cover.

8. A method according to any of claims 1 to 7, wherein indicia are provided on the external surface of the cover.
9. A method according to any of claims 1 to 8, wherein suspension means are secured to the external surface of the sheet material.
10. A method according to claim 9, wherein said suspension means are secured by stitching.
11. A method of making a golf club head cover, substantially as described herein with reference to the accompanying drawings.
12. A golf club head cover, which has been made by a method according to any of claims 1 to 11.